MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2019/2020

BIE2024 – INTERMEDIATE MICROECONOMICS

(All sections / Groups)

16 OCTOBER 2019
2.30 pm – 4.30 pm
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of **THREE (3)** pages, including the cover page, with **Four (4)** Short Structured Questions.
2. Attempt **ALL** questions. The distribution of the marks for each question is given.
3. Answer the questions in the answer booklet provided.

INSTRUCTION: Answer ALL of the questions.

Question 1

(a) Distinguish the "increasing return to scale" and "decreasing return to scale" by using an isoquant map for each type of return. (10 marks)

(b) An inverse demand function for a good is $P = 100 - 5Q$ and the total cost function of it is $TC = 50 + 4Q + Q^2$.
Calculate
(i) the quantity and price that the producer should produce in order to maximize profit (7 marks)
(ii) the profit the firm is making. (3 marks)

(c) Examine the idea of "diminishing marginal rate of technical substitution". (5 marks)

[Total: 25 marks]

Question 2

(a) Illustrate that certain level of pollution is acceptable by using cost-benefit analysis. Include the related diagram in your answer. (10 marks)

(b) Tony and Thanos are running their business nearby each other and their operation is affecting each other. The table below shows the profit of their business:

Thanos's Business Operating Hour	Profit (RM)	
	Thanos's Business	Tony's Business
Not operate	0	600
Half day	300	400
Whole Day	500	0

Illustrate that the society will get better benefit if the property right is defined clearly, where either Thanos or Tony owns the right to operate while another need to pay the property right owner to operate. (10 marks)

(c) Appraise "market failure" with an example. (5 marks)

[Total: 25 marks]

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Question 3

(a) Labour supply curve is upward sloping as all labour will want to work more when the wage is increased.

With the aid of the labour supply curve, criticise the above statement. (10 marks)

(b) An inverse demand function in a perfect competitive market is $P = 1000 - 20Q$ while the supply is $P = 300 + 50Q$.

Calculate the consumer surplus and producer surplus when the market is in equilibrium condition. (10 marks)

(c) A perfect competition firm is having a total cost function of $TC = 5Q + Q^2$ while the demand function is $P = 29 - 5Q$.

Calculate the price for the market in the long run. (5 marks)

[Total: 25 marks]

Question 4

(a) Firm A and Firm B are competing with each other and currently planning for a marketing strategy.

Each firm has two available options:

(i) advertise their product to grab the highest profit when another who does not advertise the product get the lowest profit, or

(ii) do not advertise their product so that both firms get a similar and higher profit than if both firms advertise their product (which both firms also get a similar profit). Nevertheless, the firm's profit is lower than the option (i).

Use a Game Tree to analyse the Nash-equilibrium. (10 marks)

(b) Assume that two flight service providers, X and Y, are facing a market demand of $Qd = 500 - P$. Assume that both average cost and marginal cost are fixed at 50.

Determine the Cournot Equilibrium for the companies. (10 marks)

(c) Analyse why Nash equilibrium more likely to occur in a game although there is an option where the players could get higher payoff than the Nash equilibrium. (5 marks)

[Total: 25 marks]

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